

WHAT IS CLAIMED IS:

1. A two-component coating system based on polyurethane comprising
 - (a) polyisocyanates which are optionally hydrophilised,
 - (b) compounds having groups which are reactive with isocyanates,
5 optionally hydrophilised, in water and optionally in the presence of organic solvents or solvent mixtures,
 - (c) one or more compounds of elements of Group VB or Group VIB of the Periodic Table, in which the element in each case has an oxidation state of at least + 4,
 - 10 (d) optionally further additives and auxiliary agents,wherein the quantities of (a) + (b) are from 20 to 99.9999 parts by weight, the quantity of (c) is from 0.0001 to 5 parts by weight, and the quantity of (d) is from 0 to 75 parts by weight, with the proviso that the sum of the parts by weight (a) to (d) is 100.
- 15 2. The coating system according to Claim 1, wherein compounds of elements selected from the group consisting of vanadium, tantalum, molybdenum, tungsten and tellurium are utilised as the component (c).
3. The coating systems according to Claim 1, wherein compounds selected from the group consisting of molybdic acid, lithium molybdate, sodium
20 molybdate, potassium molybdate, rubidium molybdate, cesium molybdate, tetramethylammonium molybdate, tetraethylammonium molybdate, molybdenyl acetylacetonate, molybdenum dioxide tetramethylheptadionate, sodium tungstate, potassium tellurite K_2TeO_3 , lithium orthovanadate, lithium metavanadate and modifications thereof, sodium orthovanadate,
25 sodium metavanadate as well as ammonium heptamolybdate are utilised as the compounds (c).
4. The coating system according to Claim 1, characterised in that the the system is a lacquer systems.
5. The coating system according to Claim 1, wherein the system is a water-
30 based lacquer system.

6. The coating system according to Claim 1, wherein the system is an adhesive system.
7. The coating system according to Claim 1, wherein the polyisocyanates (a) comprise polyisocyanates having aliphatically bound isocyanate groups.
- 5 8. The coating system according to Claim 1, wherein the polyisocyanates (a) comprise blocked polyisocyanates having aromatically bound isocyanate groups.
9. The coating system according to Claim 1, wherein the polyisocyanates (a) are based on one or more of hexamethylene diisocyanate, isophorone
10 diisocyanate, and 4,4'-diisocyanatodicyclohexyl methane.
10. The coating system according to Claim 1, wherein the polyisocyanates (a) are hydrophilically modified.
11. The coating system according to Claim 1, wherein salts of molybdic acid or condensation products thereof are utilised as the compound (c).
- 15 12. The coating system according to Claim 1, wherein lithium molybdate, sodium molybdate and/or potassium molybdate are utilised as the compound (c).
13. The coating system according to Claim 1, wherein salts of vanadic acid or condensation products thereof are utilised as the compound (c).
- 20 14. The coating system according to Claim 1, wherein lithium vanadate, sodium vanadate and/or potassium vanadate or the respective orthovanadates are utilised as the compound (c).
15. A process for the preparation of coating systems according to Claim 1, comprising introducing component (c) during the preparation of the
25 components (a) or (b) into the respective component.
16. A process for the preparation of coating systems according to Claim 1, comprising introducing component (c) into the mixture during the preparation of the system as ready-for-use.

17. A process for the preparation of coating systems according to Claim 1, comprising adding component (c) to one or more components before the addition of additional water or solvent.
18. Lacquers, paints and adhesives prepared according to the process of claim 15.
19. Substrates coated with the coating system according to Claim 1.
20. A coating systems according to Claim 2, wherein compounds selected from the group consisting of molybdic acid, lithium molybdate, sodium molybdate, potassium molybdate, rubidium molybdate, cesium molybdate, tetramethylammonium molybdate, tetraethylammonium molybdate, molybdenyl acetylacetonate, molybdenum dioxide tetramethylheptadionate, sodium tungstate, potassium tellurite K_2TeO_3 , lithium orthovanadate, lithium metavanadate and modifications thereof, sodium orthovanadate, sodium metavanadate as well as ammonium heptamolybdate are utilised as the compounds (c).